

Work Order ID 133091

Tuesday, May 26, 2015 12:43:52 PM

133091

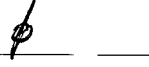
Page 1

Item ID: D2858-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Hinge Bracket
 Start Date: 5/26/15 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 5/26/15 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: MAY 26 2015 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start ***NR1***
 Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2858	Rev C								
100	BAND SAW	0.00							
100									
Bandsaw	Memo	0.00							
Jeaspa Bandsaw	Cut blanks 5.850 " Note: 1 Blank Makes 3 Parts								
110	HAAS CNC VERTICAL MACHINING #1	0.00							
110									
HAAS 1	Memo	0.03							
HAAS CNC vertical machine #1	1-Machine per folio FA941 FOLIO REV: <u>AA</u> DWG REV: <u>C</u> 2-Deburr any rough edges								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120									
QC	Memo	0.00							
Quality Control									

4  **DAS 25 9-89** 15-6-3

12  **DAS 25 9-89** 15-6-3

12  **DAS 25 9-89** 15-6-3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00		B.A 15/06/04		12	0		DAS 08 9-80
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				(12)	0		12-15/06/04
150 *150* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum M 131545. Memo START TIME: 1045 OVEN TEMPERATURE: 320° FINISH TIME: 11:15.	0.00 0.00				12	0	15-6-9	DAS 34 9-80

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160 *160* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				(12)			DAS 38 JUN 9 2015
170 *170* Packaging Packaging	Identify as per dwg & Stock Location: <u>stop</u> Memo	0.00 0.00				12			DAS 27 JUN 10 2015
180 *180* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.02				MLJ			JUN 11 2015

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Picklist Print

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Start Qty: 12.00

Required Qty: 12.00

Comments: IPP C00.06.22Removed P/O for powder coatEC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.500X01.25 0		Purchased	No			100	f	13.2000	0.163	3			

M6061T6B1 500X01 250

6061-T6 Bar 1.50 x 1.25

**

SL1563

Location

Loc Qty

Loc Code

MAT003

13.2

m127454

1.2

m129167

12

x 2.0

DQA: _____ Date: _____

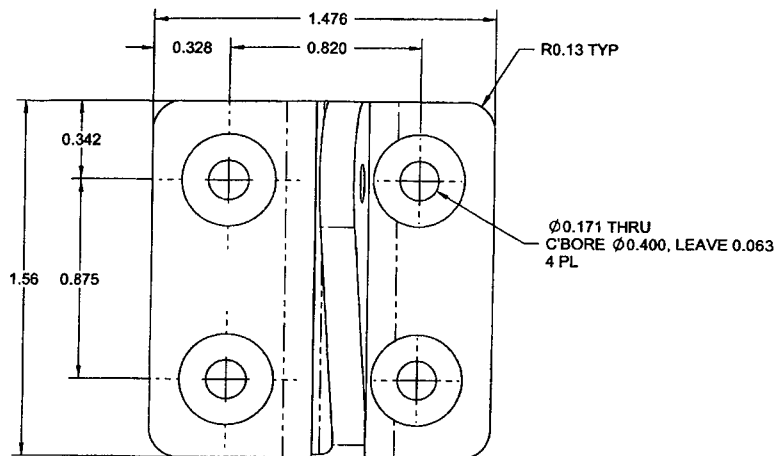


WORK ORDER NON-CONFORMANCE / UPDATE

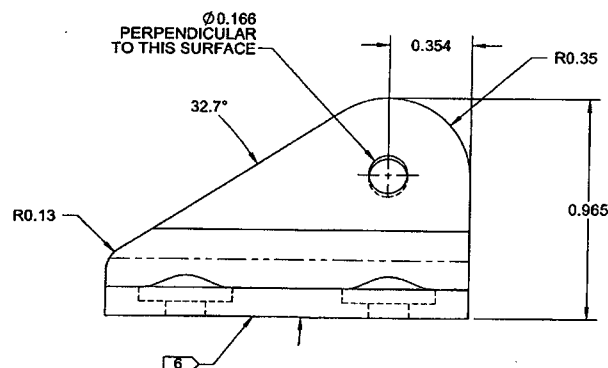
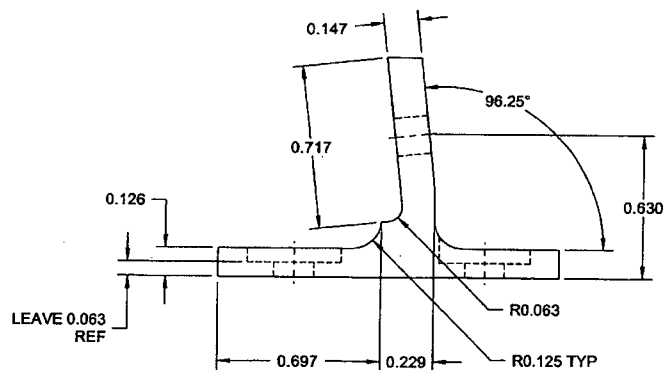
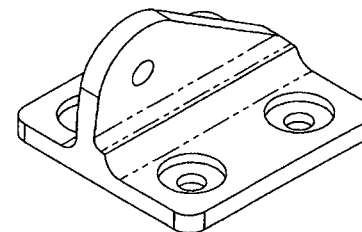
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : _____			



STOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 133091 MWS
1505-26



RELEASED
2010-11-26

D2858-1 HINGE BRACKET

NOTES:

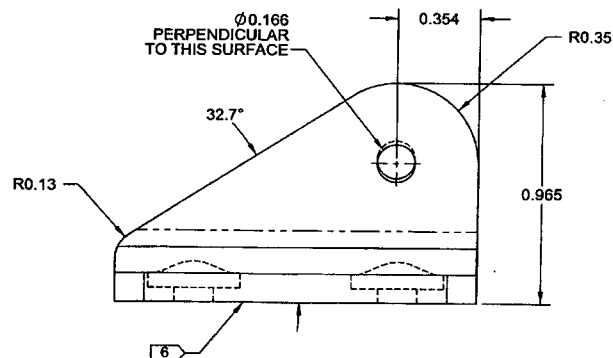
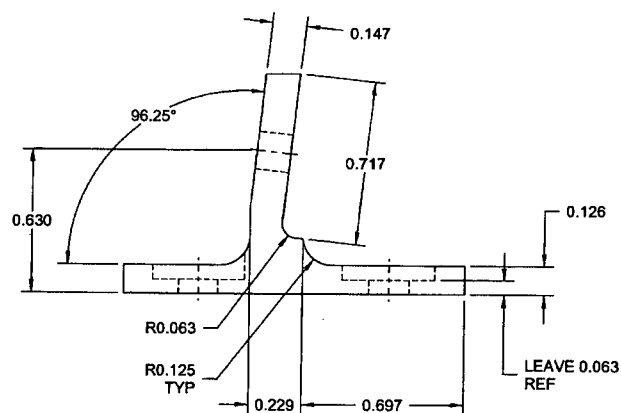
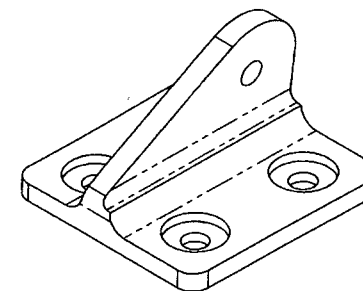
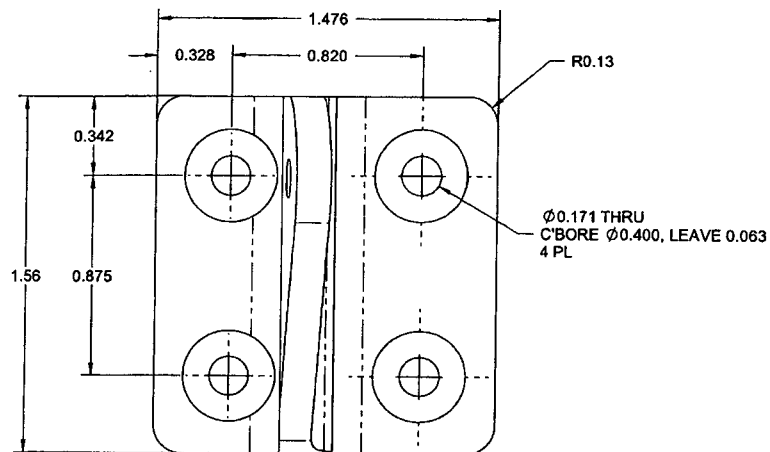
- 1) MATERIAL: 6061-T6 ALUMINUM PER QQ-A-225/8 OR QQ-A-200/8 OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: DART P/N "D2858-1" PER DART QSI 044 6.1
- 7) WEIGHT: 0.04 lbs

C	REDRAW TO CURRENT STD. REMOVE ENGRAVED P/N, IDENT. NOW W/ MARKER (A8-1, A8-2), REF PAR 10-040	CP	10.10.12
B	0.717 WAS 0.667, 1.56 WAS 1.559	KE	99.02.28
A	NEW ISSUE	KE	98.12.14
REV.	DESCRIPTION	BY	DATE
DESIGN	KE		
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.10.12		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.
D2858
REV. C
SHEET 1 OF 2
TITLE
HINGE BRACKET
SCALE
NTS

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D2858-2 HINGE BRACKET

NOTES:

- 1) MATERIAL: 6061-T6 ALUMINUM PER QQ-A-225/8 OR QQ-A-200/8 OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: DART P/N "D2858-2" PER DART QSI 044 6.1
- 7) WEIGHT: 0.04 lbs



RELEASED
2010-11-26

DESIGN	KE	DART AEROSPACE LTD	
DRAWN	GP	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D2858	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		HINGE BRACKET	NTS
DATE	10.10.12	COPYRIGHT © 1988 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DART AEROSPACE LTD		Work Order: 133891
Description: Hinge Bracket		Part Number: D2858-1
Inspection Dwg: D2858	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.171	+0.005/-0.001	175	✓		g-pin	
Ø0.400	+0.006/-0.001	403	✓		Vern	SL-16
R0.125	+/-0.010	125	✓			
0.328	+/-0.010	328	✓			
0.820	+/-0.005	820	✓			
1.476	+/-0.010	1.476	✓			
0.342	+/-0.010	342	✓			
0.875	+/-0.005	875	✓			
1.56	+/-0.030	1.563	✓			
0.147	+/-0.010	148	✓			
0.717	+/-0.010	722	✓		HG	
0.697	+/-0.010	699	✓		Vern	
0.229	+/-0.010	230	✓			
R0.125	+/-0.010	125	✓			
R0.063	+/-0.010	063	✓			
0.063	+/-0.010	067	✓			
0.126	+/-0.010	129	✓			
0.630	+/-0.010	631	✓			
R0.354	+/-0.010	354	✓			
0.965	+/-0.010	968	✓			
Ø0.166	+0.005/-0.001	167	✓			
R0.125	+/-0.010	125	✓			
32.7°	+/-0.5°	32.7	✓			

Measured by: JL	Audited by: Da	DAS	Preliminary Approval:
Date: 15-6-3	Date: 15/06/04	08 9-89	Date:

Rev	Date	Change	Revised by	Approved
A	07.10.30	New Issue	KJ/EC/DD	
B	11.11.07	Dwg Rev updated	KJ	